

Application No.: 10/729,009
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AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) Replacement Drawing Sheets that comply with the provisions of 37 C.F.R. § 1.84. The Replacement Drawing Sheets incorporate the following drawing changes:

In Fig. 1, reference numeral --12b-- has been added to indicate the diffuser sheet peripheral wall 12b (page 16 of the specification);

In Fig. 1, reference numeral --13b-- has been added to indicate the closure shell peripheral wall 13b (page 16 of the specification); and

In Fig. 1, reference numeral “72” has been amended to indicate a gap between the outer cylindrical shielding plate 67 and a peripheral wall of the housing 11 (page 17 of the specification); and

In Fig. 3, reference numeral “45” has been amended to --45’--.

It is respectfully requested that the Replacement Drawing Sheets be approved and made a part of the record of the above-identified application.

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REMARKS

Claims 1-11 are pending in the application. New claims 8-11 have been added.

Drawing Changes

Minor changes have been made to Figs. 1 and 3 so that they are consistent with the disclosure in the specification.

The Examiner is respectfully requested to approve and enter these drawing changes.

Specification

Minor changes have been made to the specification to place it in better form for U.S. practice.

The above-noted specification changes are set forth in the attached Substitute Specification. The Substitute Specification does not contain new matter.

A Comparison Specification showing the matter being added to and deleted from the original specification is also submitted herewith.

The Examiner is respectfully requested to approve the Substitute Specification.

Claim Objections

Claim 2 has been objected to because of some informalities.

Claim 2 has been amended to overcome this objection.

The Examiner is respectfully requested to reconsider and withdraw this objection.

Further minor changes have been made to the pending claims to place them in better form for U.S. practice.

Claim Rejections – 35 U.S.C. § 112

(a) Claims 1-7 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. More specifically the Examiner states that the specification is enabled for a transfer charge that generates a gas of 1.2 moles/100g or more, but one of ordinary skill in the art would not be able to determine what composition would meet the limitations of claim 1 without undue experimentation.

Applicants respectfully submit that the gas of 1.2 moles/100g or more (or “at least 1.2 moles/100g” as recited in newly added claim 10) is generated by the “gas generating agent molded article” and not by the transfer charge which is a mixture of a transfer charge powder and the gas generating agent molded article.

The specification of the present application clearly states, for example in page 20, last paragraph, that the composition of the gas generating agent molded article for the first transfer charge includes: 34.4 mass % of nitroguanidine, 55.6 mass % of strontium nitrate, 10.0 mass % of carboxymethyl cellulose sodium salt (combustion temperature: 2200°C; amount of gas generated: 2.5 moles/100 g). The specification also clearly states, for example in page 21, that the composition of the gas generating agent molded article for the second transfer charge is the same as the first transfer charge.

Moreover, the specification clearly indicates, in pages 20 and 21, that the first transfer charge includes a mixture of boron/niter and the gas generating agent molded article, and the second transfer charge includes only the gas generating agent molded article.

In view of the foregoing disclosures, Applicants respectfully submit the one of ordinary skill in the art would be able to determine what compositions would meet the limitations of claim 1 without undue experimentation.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claims 2 and 6 have been rejected under 35 U.S.C. § 112, second paragraph, because of some informalities.

Claims 2 and 6 have been amended to overcome this rejection.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim Rejections – 35 U.S.C. § 102

Claims 1-3 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Dahl et al. (USP 6,139,055). This rejection is respectfully traversed.

As alleged by the Examiner in the Office Action, Dahl states that the igniter material in a primary igniter assembly and a secondary igniter assembly is substantially composed of boron potassium nitrate (BKNO₃) or may be composed of various other types of materials.

Dahl, however, discloses only boron potassium nitrate (BKNO₃) as a specific igniter material for the igniter assembly and does not disclose or suggest that the igniter material

includes "at least one igniter and at least one transfer charge, the transfer charge being a mixture of a transfer charge powder and molded articles of a gas generating agent."

By providing an igniter material including a transfer charge made of a mixture of a transfer charge powder and molded articles of a gas generating agent, when the volume is the same as compared with a case where only the transfer charge is used, it is possible to endure provision of energy for igniting the gas generating agent, an internal pressure in the combustion chamber is increased to enhance ignitability of the gas generating agent, and the charging mass as the transfer charge is increased. Therefore, it is possible to increase the amount of generated ignition energy and internal pressure at the time of combustion without increasing the entire gas generator and the size of the transfer charge accommodation space (see page 3, last paragraph of the specification).

Therefore, Dahl fails to disclose or suggest the "ignition means" as recited in claim 1.

Claims 2 and 3, dependent on claim 1, are allowable at least for their dependency on claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim Rejections – 35 U.S.C. § 103

(a) Claims 4-6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dahl. This rejection is respectfully traversed.

Claims 4-6, variously dependent on claim 1, are allowable at least for their dependency on claim 1.

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The Examiner is respectfully requested to reconsider and withdraw this rejection.

(b) Claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dahl in view of Nielson et al. (USP 6,224,099). This rejection is respectfully traversed.

Claim 7, dependent on claim 1, is allowable at least for its dependency on claim 1.

The Examiner is respectfully requested to reconsider and withdraw this rejection.

New Claims

New claim 8-11, dependent on claim 1, are allowable at least for its dependency on claim 1.

A favorable determination and allowance of these new claims is earnestly solicited.

Conclusion

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and objections, and allowance of the pending claims are earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Maki Hatsumi (#40,417) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

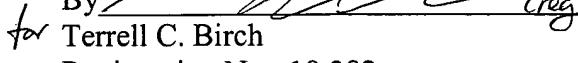
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or to credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Dated: December 19, 2005

Respectfully submitted,

for 
By 
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Attachments: Two (2) Replacement Drawing Sheets (Figs. 1 and 3)
Substitute Specification - 13 pages
Comparison Specification - 14 pages